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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/578,851 | 05/10/2006 | Antero Heinonen | 11001.163 | 5045 |
| 7590 12/21/2010 | | | | |
| Fildes & Outland 20916 Mack Ave. Suite 2 Grosse Pointe Woods, MI 48236 | | | EXAMINER SUERETH, SARAH ELIZABETH | |
| | | | ART UNIT 3749 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/578,851

Applicant(s)

HEINONEN, ANTERO

Examiner

SARAH SUERETH

Art Unit

3749

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/29/10 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor (4407266) in view of Hepner (4235220) (cited on applicant's IDS).

4. Molitor discloses at least one hood (10), which is intended to be installed above the kitchen appliance (col. 3, lines 17-20), an exhaust-air connection (17 and 25) for connecting the hood to the exhaust duct (12), and a separator (E), for separating grease from the exhaust air (see "liquid particles" col. 7, lines 9-24), exhaust-air duct (12); an intake air connection (D) that is capable of varying the exhaust temperature and flow

using a temperature sensor (42) (Figure 1), a heat exchanger (H), a motorized fan (col. 6, line 18) and a damper (68).

Molitor, as discussed above, discloses the invention of claim 11 with the exception of a grease separator arranged as claimed. Molitor shows only one separator (E) located near the hood (10), but does not show a grease separator arranged in the exhaust duct as claimed inside of a "cell". Molitor shows the air bypass duct (D) joining the exhaust stream at a point just downstream of the first grease separator (E).

Hepner discloses a system for ventilating an appliance including an oven hood (12) with one separator (Figure 4, see element 52) located adjacent the hood, and a second separator (60) located inside the exhaust duct (58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Molitor apparatus to include a second separator in the exhaust duct (12), in order to remove any particles or odors remaining in the exhaust stream that have not been extracted by the previous filter (Hepner, col. 5, lines 35-38).

Molitor discloses that the grease filter is in communication with a temperature sensor (42). When placing an additional grease filter, it would have been obvious to one of ordinary skill in the art to include a temperature sensor near that device.

The examiner considers Hepner to suggest placing the filter in the exhaust duct (12), which would allow the temperature controlled exhaust stream to flow through as claimed. The position of the filter inside the exhaust duct is regarded as being inside of a cell in the same manner as applicant's invention.

Regarding the limitation that the grease collector is located inside a cell wider than the exhaust duct, Hepner suggests this claimed limitation, as Figure 4 shows it arranged after the exhaust duct (54) in a larger area (near element 58). Also, Hepner shows the claimed feature of providing it in a chamber that will slow down the air flow due to its larger geometry (see Figure 4).

Regarding the limitation that the cell is arranged downstream of the hood, it is clear from Figure 1 that exhaust air first enters the exhaust duct, and then is mixed with intake air in a downstream location.

However, it is not clear if the intake air assembly is "separate from the hood". Molitor discloses that the hood has two components, a ventilating or exhausting part (V), and an intake air control assembly (M). Figure 1 shows them to be connected by a housing (10), but they are disclosed to be separate devices (col. 3, lines 10-15).

Therefore, Molitor arguably discloses the claimed feature of providing the air intake connection separately from the hood.

However, in the event applicant disagrees, the courts have held that if it were considered desirable for any reason to obtain access, it would be obvious to make a cap removable for that purpose (In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961), Also MPEP 2144.04 Section C).

Therefore, it would have been obvious to one of ordinary skill in the art to make the Molitor ventilation assembly (V) and the air intake control assembly (M) separable in order to easily maintain or repair components of either assembly without lifting the entire apparatus.

Regarding the limitation that the intake and exhaust air are mixed to a temperature designed to cool the separator, Moliter discloses using temperature means to adjust the temperature of the intake air before mixing it with the exhaust stream just before entering the exhaust duct (see Figure 1), and Hepner shows placing a grease separator in the exhaust duct. Therefore, the combined device will function to provide a temperature controlled stream onto the separator.

Regarding claims 12 and 13, the cell is regarded as elongated and horizontal, and Hepner is regarded to suggest placing a filter in the claimed location.

Regarding claim 14, Moliter shows a duct (D), but does not explicitly show nozzles attached to the duct. However, the examiner takes Official Notice that it was old and notorious in the art to use nozzles to supply air. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Moliter apparatus to include air supplying nozzles, for the well known purpose of increasing the velocity of the air supplied through the duct.

Regarding claim 15, intake air duct (D) is joined to ventilation duct (13).

Regarding claim 16, elements 26 and 27 are regarded as baffles.

Regarding claim 17, water is supplied through nozzles (38).

Regarding claims 18-20, Moliter does not disclose the relative dimensions of the air duct. The courts have held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. (In

Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), also MPEP 2144.04).

In this case, the precise size and shape of the mixing cell is a matter of obvious design choice, and the capacity of the airflow through it will obviously vary with the selected size.

Response to Arguments

5. Applicant's arguments filed 7/29/10 have been fully considered but they are not persuasive. Applicant argues that the prior art device is incapable of cooling a grease separator. However, Moliter discloses in multiple places in the specification that the heat exchangers are operable to supply either heated or cooled air (col. 2, lines 62-67).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH SUERETH whose telephone number is (571)272-9061. The examiner can normally be reached on Mondays through Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah Suereth/
Examiner, Art Unit 3749